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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,486	03/18/2005	Herbert Lifka	NL020885US	5058

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EXAMINER

ROY, SIKHA

ART UNIT	PAPER NUMBER
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2879

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07/31/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/528,486	Applicant(s) LIFKA ET AL.	
	Examiner Sikha Roy	Art Unit 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 16-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15, 22 and 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>0305, 1005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Group I, claims 1-15 and 22, 23 in the reply filed on February 25, 2008 is acknowledged. Claims 16-21 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

The Amendment, filed on April 8, 2008 has been entered and acknowledged by the Examiner.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: The reference no. 14 for crossover as mentioned in page 8, lines 18,19 is not shown in Figs. 2C, 2D. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities:

As provided in 37 CFR 1.77(b) the specification should include following sections, each one with proper section headings such as 'Title of the Invention', 'Background of the Invention', 'Summary of the Invention', 'Brief Description of Drawing', 'Detailed Description of the Invention', 'Claims' and 'Abstract'.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, 4, 7, 8 and 22, 23 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 6,414,249 to Vickers.

Regarding claim 1 Vickers discloses (Fig. 5, 7,9 col. 6 lines 62-67, col. 7 lines 35-67, col. 8 lines 1-34) an electrical device comprising a substrate 62 carrying at least one component comprising at least one electrode 50 (anode stripes), a first connecting line

(50R, 50G, 50B) connected to the electrode wherein the first connecting line (anode stripe interconnected to buses) 50G bridges a second connecting line 50R by means of a crossover, wherein the crossover is at least at one side bounded by electrically insulating structure 66 (insulating layer).

Regarding claims 3 and 22 Vickers discloses in Fig. 5 the crossover (dashed lines 70, 74) is completely surrounded by the electrically insulating structure (ILO 66).

Regarding claim 4 Vickers discloses the electrical device comprising several first connecting lines 50G having crossover with at least second connecting lines 50R wherein each crossover is bounded by an electrically insulating structure.

Regarding claim 7 Vickers discloses (col. 1 lines 15-20) the electrical device is an integrated circuit.

Regarding claim 8 Vickers discloses (col. 7 lines 27-30) the substrate (anode plate) is made of glass.

Regarding claim 23, Applicant claims the intended use of the electrical device and does not differentiate the claimed device from prior art electrical device structurally. Thus the Examiner asserts that the electrical device of Vickers is capable of being used as a test structure for testing display panel.

Claims 1-6 and 22, 23 are rejected under 35 U.S.C. 102(e) as being anticipated by USPN 6,787,992 to Chuman et al.

Regarding claim 1 Chuman discloses (Fig. 5 col. 5 lines 26-col. 7 line 6) an electrical device comprising a substrate 10 carrying at least one component comprising

at least one electrode 15, a first connecting line 19 electrically connected to the electrode wherein the first connecting line 19 bridges a second connecting line 18 by means of a crossover, the crossover is at least at one side bounded by an electrically insulating structure 17a.

Regarding claim 2 Chuman discloses (Figs. 5,7) the electrically insulating structure 17a extends into a direction perpendicular to the substrate 10 and comprises at least one overhanging portion 17c projecting in a direction substantially parallel to the substrate.

Regarding claims 3 and 22 the crossover (of first connecting line over the second connecting line) is completely surrounded by the insulating structure 17a.

Regarding claim 4 Chuman discloses (fig. 5) the electrical device comprising several first connecting lines 19 having crossover with at least second connecting lines 18 wherein each crossover is bounded by an electrically insulating structure.

Regarding claim 5 Chuman discloses (Fig. 21, 22) the electrical device is an electroluminescent display panel and the component is a display pixel.

Regarding claim 6 Chuman discloses the display pixel comprises a first electrode, an electroluminescent material and a second electrode, the second electrode 29 being connected to the first connecting line 19.

Regarding claim 23, Applicant claims the intended use of the electrical device and does not differentiate the claimed device from prior art electrical device structurally. Thus the Examiner asserts that the electrical device of Chuman is capable of being used as a test structure for testing display panel.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9- 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,787,992 to Chuman et al., and further in view of USPN 6,414,249 to Vickers.

Regarding claim 9 Chuman discloses (Figs. 21,22) a method of manufacturing an electrical device comprising a crossover of first connecting line over a second connecting line comprising the steps of forming successively first connecting line 19 and second connecting line 18 on a substrate 10, depositing insulating layer on the first and second connecting lines, forming electrically insulating structures (Figs. 14,15) 17c which at least partly bound the area where crossover is to be formed and then depositing electrically conductive layer .

Chuman does not expressly disclose defining or creating openings in the insulating layer at positions where electrical contacts are to be provided with first connecting line and a connection point.

Vickers discloses (Fig. 5 col. 7 lines 60 through col. 8 line 17) the method of creating openings or vias 50 by removing the insulating region 66 so that electrical contacts can be provided at the openings.

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to include the step of creating openings in the insulation layer of Chuman as suggested by Vickers for providing contact with the electrically conductive layer to first connecting line.

Regarding claim 10 Chuman discloses (Figs. 5,7) the electrically insulating structure 17a is formed to extend into a direction perpendicular to the substrate 10 and to comprise at least one overhanging portion 17c projecting in a direction substantially parallel to the substrate.

Regarding claim 11 Chuman discloses the electrically insulating structure surrounds the crossover.

Regarding claim 12 Chuman discloses (Fig. 22) the method further comprises forming a first electrode 23a simultaneously with the second connecting line, forming an EL layer 28 on the first electrode at least at the positions where display pixels are to be formed and forming the second electrode simultaneously with electrical conductive layer so as to connect the second electrode with first connecting line.

Regarding claim 13 Chuman discloses the electroluminescent layer 28 is formed after the formation of insulating structure 17c.

Regarding claim 14 Chuman as modified by Vickers discloses the electrical device is an integrated circuit and the first connecting line connected to the integrated circuit.

Regarding claim 15 Chuman as modified by Vickers discloses the integrated circuit is made on glass substrate (Chuman col.12 line 18).

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sikha Roy whose telephone number is (571) 272-2463. The examiner can normally be reached on Monday-Friday 8:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (571) 272-2457. The fax phone number for the organization is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sikha Roy/
Primary Examiner, Art Unit 2879